

NEW SPECIES OF *DREPANULIDAE*, *NOCTUIDAE*, AND
GEOMETRIDAE IN THE TRING MUSEUM.

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FAMILY DREPANULIDAE.

1. *Cyclidia nigralbata* spec. nov.

Forewing: white, the markings blackish fuscous; basal area almost wholly fuscous, the external limiting band darkest; median fascia with the edges rounded between the veins, containing a pale cell lunule, and often much narrowed below the middle; outer fascia broad at costa and inner margin, constricted at middle, marked by white dashes on the veins; subterminal spots often heavily mixed with grey and accentuated so as to form a narrow border; the median fascia is always entirely separated both from the basal patch and the outer fascia by broad, uninterrupted bands of white, the outer one more or less sinuous or curved below middle; this band in *capitata* is straight and narrower, and always more or less interrupted by grey above the middle.

Hindwing: with the same three dark bands, the median and outer straight, more uniformly broad.

Underside with the dark areas emphasised; both wings with round dark cell-spots, that in the forewing obscured.

Face, palpi, vertex, and antennae black; thorax white; dorsum dark grey with pale segmental rings.

Expanse of wings: the same as in *capitata*.

Several examples of both sexes from Japan: Oyama, Oiwake, Yokohama, Hakodate. Specimens from Gensan are partly intermediate between this form and *capitata*, the white bands being more uninterrupted.

2. *Deroca decisa* spec. nov.

This new Japanese species is much larger than *phasma*, the ♂ expanding 42 mm. and the ♀ 40 mm.; in the ♂ the dark markings are blacker and more solid; the three inner lines form three smoky fuscous costal blotches; the discal spot is large and loaf-shaped; the two black outer bands are connected, leaving two whitish spots before apex and an outer slate-coloured lunulate line; the inner edge of the black apical blotch shows three blunt teeth, the lowest of which between veins 3 and 4 does not reach the termen. Hindwing with traces of an inner, median, and subterminal band of spots near inner margin only.

Underside like upper.

Head, thorax, and abdomen black, the last with white segmental rings.

The ♀ is hyaline grey with the markings darker; the subterminal band is quite narrow, separated from the black costal spot by a white triangle, bent outwards below costa, forming a blunt angle between 6 and 7 and again between 4 and 5, then thickened and rounded between the veins, followed by another line of grey triangular spots on the veins, before the dark terminal band of oblong blotches.

Hindwing with two dark grey outer lines as well as the terminal.
 Head, thorax, and dorsum whitish, the last with dark saddle-shaped marks.
 Japan.

FAMILY NOCTUIDAE.

SUBFAMILY ACRONYCTINAE.

3. *Acronieta nigralbata* spec. nov.

Forewing: ochreous grey; a purplish grey basal patch, edged with black curved lines, and traversed by the pale subbasal line, from costa to vein 1; a broad white double inner line, oblique to beyond middle of inner margin; its outer edge angled outwards in cell and on vein 1, inwards on median; its inner edge inangled on vein 1 and above inner margin; traversed at middle by a blackish line, the inner half tinged with blue-grey and speckled with dark, followed by a broad olive fuscous band, darkest close to line; outer line double, sharply bent outwards beneath costa, then oblique inwards, sharply lunulate-dentate, and indented on each fold, followed by a dark brown shade from costa to vein 4 and in submedian interval, this last extending bar-shaped to termen at anal angle; a large diffuse fulvous grey patch, ill-defined, represents the reniform stigma; terminal line lunulate-dentate, with slight dark scaling on the folds; fringe chequered ochreous and blackish.

Hindwing: brownish with darker termen; a slight dark outer line.

Underside grey suffused with fuscous in forewing, with ill-marked lines; in hindwing luteous tinged with ochreous, with the lines dark and distinct.

Head pale ochreous; thorax olive-grey mixed with black; abdomen dark grey.

Expanse of wings: 32 mm.

3 ♀♀ from the Khasia Hills, Assam, October 1895.

Allied to *albonigra* Herz and *nigromaculata* Warr., but the dark shades are narrower.

4. *Acronieta cubitata* spec. nov.

Forewing: pale grey suffused with dark grey; a darker shade beyond outer line; the median line thick and dark, making the reniform stigma dark; subbasal line marked by double dark strigae on costa; inner line double, slightly oblique outwards, inangled on both folds, the lower angle met by a thick black streak from base, and angled outwards below vein 1; median shade angled in the reniform stigma, then inwardly oblique and inangled below vein 1, all but touching the angle of inner line; orbicular stigma round, pale grey with black outline and dark centre; reniform blackish with black outline; outer line bent sharply outwards below costa, vertical from 8 to 4 with a slight indentation on vein 5, then incurved and roundly bent at right angles below reniform, white outwardly thickly edged with black; subterminal line indistinct, marked by slight wedge-shaped dark blotches; fringe mottled, black and grey in basal half, black and white in outer.

Hindwing: dirty whitish, with luteous grey cell-spot, outer line, and terminal band; a black terminal line; fringe whitish grey.

Underside of forewing dark grey; the costa, termen, and outer line whiter; of hindwing white, grey-speckled along costa, with dark cell-spot, outer line, and subterminal shade.

Head, thorax, and abdomen pale and dark grey mixed; second segment of palpi externally black; legs and pectus grey; tarsi black with white joints.

Expanse of wings: ♂ 32 mm.; ♀ 34 mm.

3 ♂♂, 1 ♀: the ♂♂ (type) from Chabarovsk, Ussuri Railway, taken in July 1910 and 1911 by E. Borsow; the ♀ from Pompejefka, Little Chingan Mountains, June 1910, by W. Mau.

Antennae fulvous, lamellate and quite simple in the ♀; serrate with close short clavate teeth in the ♂. The single ♀ is a little paler than the ♂♂.

5. *Simyra argentacea* H.S. ab. *torosa* Guen.

This seems a distinct form. The forewing is distinctly narrower than in *argentacea*, while the hindwing is pure white. Guenée says "in both sexes"; I have only ♂♂ to compare. Hampson in describing *argentacea* (*Cat. Lep. Phal. B. M.* viii. p. 174) calls the hindwing almost pure white in the ♀; this probably refers to the ♀ of the form *torosa*; the only ♀ of *argentacea* in the Tring Museum collection has the hindwings nearly as dark as the ♂♂.

2 ♂♂ from Uralsk from M. Bartel, one caught July 1906, the second bred in August.

6. *Simyra sincera* spec. nov.

Forewing: pure white; the veins lined on both sides with very pale grey, but peppered with blackish in inner-marginal half of wing, more sparsely in upper half; a distinct black spot at lower end of cell.

Hindwing and fringe pure white.

Underside white, slightly grey-tinged in forewing.

Head, thorax, and abdomen white, the head and prothorax faintly grey-tinged; forelegs in front and all the tarsi grey; antennal shaft white, the pectinations ferruginous.

1 ♂ (type) from Bargacum, Syr-Daria, June 1911 (Koshantschikoff).

SUBFAMILY EUXOINAE.

7. *Rhyacia* (*Epipsilia*) *punctinotata* spec. nov.

Forewing: smooth clay brown, without dark dusting; the lines marked by blackish dots on veins; the subbasal by a dot on costa and median vein; the inner by dots on costa, median vein, and vein 1, a smaller dot on subcostal, the line outcurved between median vein and vein 1, the extremity of the curve marked by a dot on submedian fold, and again outcurved below vein 1, ending in a slight dot on inner margin; the orbicular and reniform with slightly paler outlines, the former flattened, the latter with a blackish cloud at lower end, the cell between them and before orbicular blackish; a slight black cloud at end of claviform which is undefined; outer line bent outwards below costa, starting from a black costal spot, oblique outwards from 8 to 4, then incurved, marked by a spot on all veins and on inner margin nearer base; subterminal line unmarked, but indicated by a row of grey lunules preceding it; slight terminal dark spots; fringe concolorous.

Hindwing: whitish, slightly grey tinged, more strongly before termen; the veins blackish; a grey cell-spot, and dark lunulate-dentate outer line; fringe whitish, beyond some slight terminal lunules.

Underside of forewing fuscous, with costal area ochreous and terminal area pale grey; of hindwing white with dark cell lunule; both wings with dark outer line; costal and terminal area speckled with dark.

Head, tegulae, patagia, and thorax brown; dorsum greyish white with anal tuft brown; palpi with second segment blackish, terminal pale brown; pectus and venter shining whitish; legs fuscous.

Expanse of wings: 40 mm.

1 ♂ from Kainsk, Siberia, July 1911 (Thomas).

Antennae with short ciliations.

SUBFAMILY AMPHIPYRINAE.

8. *Aederemia marmorata* spec. nov.

Forewing: ♂ bluish white in basal area, along costal to outer line, and in the three stigmata; costa marked with black spots at origin of lines; a black spot at base of costa; a subbasal black costal striga, and two near base of submedian interval; inner line double, black; the inner arm broken up into a small blotch on costa, a spot above median vein, and a fine line angled outwards on submedian fold and inwards on vein 1; the outer irregularly dentate; claviform stigma a white lunule, touching the lower tooth of inner line; orbicular round, confluent with a long oval lying below median vein; reniform a large lunule; all the stigmata outlined in black; the median area round them suffused with pale olive brown; outer line double, lunulate-dentate, filled up with bluish white, the outer arm obscure but followed by irregular dark blotches; terminal area bluish grey, with an indistinct pale subterminal line and a brownish blotch on termen beyond cell; a row of fine black terminal lunules; fringe white mottled with dark.

Hindwing: pale grey with dark terminal line; fringe pale slightly mottled with dark.

♀ with all the brown and black shadings intenser; the long oval white blotch beneath the orbicular stigma quadrate along median vein, produced to an angle touching outer line at vein 2, the claviform also angled and confluent with it; the terminal area bluer.

Underside of forewing fuscous, the fringe whitish mottled with dark; of hindwing bluish white in ♂, bluish grey in ♀.

Head and thorax bluish white mottled with black; dorsum whitish in ♂, dark grey in ♀, in which the black mottling of the thorax is more conspicuous.

Expanse of wings: ♂ 32 mm.; ♀ 28 mm.

A pair from Kuku Nor, Tibet.

9. *Arenostola unicolor* spec. nov.

Standinger, followed by Spuler and Hampson, refers the insects here treated of, taken at Tura, Issyk-Kul and Amdo, to *phragmitidis* Hbn.; the insect which I call *unicolor*, of which there are in the Tring Museum 3 ♀ ♀ taken in the Tedschen Oasis, Transcaspia, is slightly larger and broader-winged than European *phragmitidis*, agreeing in its pale coloration with the ab. *pallida* Tutt, but, while the fringe is always grey-brown in *phragmitidis*, in *unicolor* it is concolorous with the wing; secondly, in *phragmitidis* the hindwing is always grey with paler veins and the fringe pale; in *unicolor* the hindwing is pale ochreous like the fringe.

10. *Arenostola rufula* spec. nov.

This species is about the same size and narrowness as *phragmitidis*, agreeing in coloration with the ab. *rufescens* Tutt, but here again the fringe of forewing is unicolorous, and the costal edge is white; the hindwings are pale ochreous at base, becoming rufous ochraceous in terminal half, with the fringe beyond it paler; the head and thorax are pale rufous, concolorous with the forewing.

1 ♀ from the Tedschen Oasis, Transcaspia, taken along with the previous species, and 1 ♂ (type) from Baigacum, Syr-Daria (Koshantschikoff).

SUBFAMILY ERASTRIANAÆ.

11. *Hyposada assimilis* spec. nov.

Forewing: yellow, varied with dull red; the costal edge narrowly white to beyond outer line; a subcostal olive-fuscous streak speckled with black; lines of the yellow ground colour; the inner vertical, wavy, inangled in cell; the outer denticulate, excurred round cell, then incurved, approaching inner line on submedian fold; median fascia filled in with olive fuscous above middle and dull pink below; subterminal line lunulate, yellow, followed by a grey cloud limited inwardly by blackish wedge-shaped or triangular marks; space preceding it with dull red double streaks on the veins connected by a curved red line, mixed with grey below middle; terminal area yellow mixed with grey and red scales; a row of black terminal triangles; fringe grey intersected with yellow; a snow-white cell-spot edged with black scales.

Hindwing: similar; the cell-spot black.

Underside ochreous with dark grey markings and black spots.

Face and palpi olive brown; vertex ochreous; tegulae snow white with a dark brown line at base; thorax and abdomen pink and yellow; venter and legs ochreous.

Expanse of wings: 30 mm.

1 ♂ from Arizan, Kagi district, Central Formosa, July 1908.

Resembles *fasciosa* Moore, but smaller and duller; the markings less oblique.

Genus *Lepidopyrga* gen. nov.

Distinguished from *Stenoloba* Stgr. by the whole thorax bearing an immense erect crest of spatulate scales; the forewing longer and narrower, with costa straight and parallel to inner margin; termen more vertical; tufts of scales in cell more developed; the only species altogether more robust.

Type, *L. viridimicta* Hmps.

12. *Lithacodia larentiformis* ab. *albiterminata* ab. nov.

Differs from the type form, in which the whole of the terminal area beyond outer line is grey-brown, in having the narrower terminal border only beyond subterminal line grey-brown, the space between outer and subterminal lines white; this form occurs in both sexes; Moore evidently thought these all males and the typical form females only (see Moore, *Lep. Ath.*, p. 142). The resemblance to *fuscula* which he notices is much more striking in these whitish marked specimens than in the browner type form.

13. *Autoba grisescens* subsp. *ochreirufa* subsp. nov.

Forewing: ochreous, thickly sprinkled with pinkish rufous in the ♂, suffused with pale reddish grey in the ♀; lines as in *grisescens*, but rufous in colour in the ♂ and dark brown in the ♀; head and tegulae brown.

1 ♂ (type), Darjiling, July 1886 (Elwes); 1 ♀, Sikkim, May 1889 (Pilcher).

14. *Autoba pallescens* spec. nov.

Autoba versicolor ab. *pallescens* Warr., *Seitz. Macrol.* xi. p. 227.

This is a good species quite distinct from *versicolor*; larger in size, 22 mm. as against 16 mm.; the inner line brown, wavy; outer line blackish, oblique to vein 7, vertical to 5, then lunulate-dentate; on the costa it is followed by some brown scaling, limited externally by an oblique blackish apical streak, continued as a line across wing to beyond middle of inner margin; a subterminal row of dark spots between veins, that above anal angle larger; terminal line brownish; a lustrous pearly line at base of fringes; in the hindwing the median line runs towards tornus instead of to middle of inner margin.

Underside uniform pale straw-colour, the fringe not dark brown.

1 ♂ from Woodlark Island, April 1897 (A. S. Meek).

15. *Vescisa pervadens* spec. nov.

Forewing: ochreous in the ♂, pale fawn grey in the ♀, a little paler than *commoda*, which also occurs in the Solomon Islands; lines interrupted and hardly marked except at costa, where the inner line is indicated by a single black striga, the median by a double striga, the outer by a single oblique line outwards, followed by a dark triangle before the apex; below the angle at vein 6 the outer line becomes lunulate-dentate; the other two are indicated by brown flecks on the veins; slight dark speckling over the wing; a line of dark lunules along termen.

Hindwing with dark cell-spot and three parallel lines; the median and outer brown, the subterminal black, diffuse, not restricted to a blotch at anal angle, but crossing wing as far as vein 6.

Underside in both sexes darker, with a reddish tinge, densely speckled, with the lines indicated in black.

Head and tegulae dark brown in ♀, ferruginous in ♂; thorax and abdomen like wings, in the ♂ whiter; second segment of dorsum with a large black lateral spot.

Expanse of wings: 24 mm.

1 ♂ (type) from Guadalcanar, April 1901, 1 ♀ Bongainville, May 1904, Solomons (A. S. Meek).

16. *Holocryptis bisectalis* ab. *pura* ab. nov.

Differs from *bisectalis* Wlk. type in that the white ground colour is perfectly pure; the black bar is thick and velvety black; the spot above anal angle reddish inwardly edged with black.

In the hindwing the markings beyond the bar are black, thick, and well-defined.

The white of the thorax and abdomen is also pure.

1 ♂ from the Khasia Hills, Assam.

Genus *Parerastria* gen. nov.

Tongue well developed; frons smooth; palpi upturned, the second segment moderately scaled, the third short, smooth; antennae of ♂ serrate, pubescent; the basal segment enlarged, with a slight tuft; head and thorax roughly scaled; metathorax slightly crested; dorsum smooth; forewing elongate-triangular; the costa protuberant beyond middle; apex blunt; termen excised shallowly from 7 to 4, which is somewhat prominent, then oblique; the tornus with a strong tooth of scales; inner margin sinuate, incurved before the scale-tooth; forewing with veins 7, 8, 9 stalked; 10 and 11 free from cell; 5 from just above 4 in both wings; in hindwing 3, 4 and 6, 7 from angles of cell. Type: *P. castaneata* spec. nov.

17. *Parerastria castaneata* spec. nov.

Forewing: chestnut brown; the costa at base and the terminal area narrowly white; inner line dark, oblique and straight from costa to submedian fold, then inwardly oblique to near base of inner margin; the costa spotted with brown before the protuberance; orbicular stigma a small annulus with brown outline; reniform large, somewhat oblique, with dark outline and brown centre; outer line oblique outwards to vein 7, then slightly lunulate-dentate, vertical to 4, incurved to submedian fold, and again outcurved; followed by another dark line, and a brown band of which the outer edge is irregularly crenulate; termen white, except at apex; a terminal line of dark grey lunules; fringe pale grey; the tooth of scales whitish with two black marks.

Hindwing: whitish at base, becoming grey towards termen beyond a dark curved outer line.

Underside of forewing whitish, stained with rufous grey, except along termen and the inner margin, which is glossy; hindwing white with curved rufous outer line and some costal speckling.

Head and thorax brown; the tegulae and patagia mixed with paler and some dark scales; abdomen grey, the anal tufts whitish.

Expanse of wings: 28 mm.

1 ♂ from Mackay, Queensland.

Resembles somewhat at first sight a small pale *L. camelina*.

SUBFAMILY EUTELIANAE.

18. *Bombotelia nigriplaga* spec. nov.

Forewing: grey, with some dull rufous suffusion; the whole basal area, a costal triangle at middle, and a funnel-shaped praeapical mark black; vein 3 ochreous; inner line white with a dark line at centre, oblique from costa to median vein, then inbent and black; reniform stigma lunate, black edged finely with white, strongly constricted at middle, contiguous to the median costal triangle; median and outer lines fine, parallel to each other, oblique outwards and straight to vein 6, there angled and incurved, becoming dentate-lunulate below vein 3, above it filled up with black; the terminal half of wing below 3 and the space above it between reniform and median line rufous tinged: sub-terminal line marked with white to vein 6, and again below 3, obsolete between; a row of black terminal lunules; a slight pale ochreous streak along cell-fold to median line; fringe dark grey.

Hindwing : white in basal half, brownish fuscous in terminal ; black terminal lunules ; a slight pale streak to termen across submedian interval ; the veins dark before the border ; cell-spot dark.

Underside reddish grey, with dark cell-spot and outer line rising from a white costal dot ; the apex and inner margin white ; subterminal line formed of black and white lunules ; hindwing paler, white in inner-marginal half, with prominent black cell-spot and black blotch at anal angle ; two curved outer and one subterminal dark line.

Face, palpi, tegulae, and patagia dark brown-grey ; the abdomen paler grey with dark segmental rings.

Expanse of wings : 30 mm.

1 ♀ from Oetakwa River, Snow Mountains, Dutch New Guinea, October to December 1910 (A. S. Meek).

19. *Bombotelia rothschildi* spec. nov.

Forewing : purplish plum-colour ; the lines dark, obscure and interrupted ; inner line oblique outwards, preceded by a grey line, then subobsolete, curved in cell and oblique inwards to inner margin, preceded in submedian interval by a brown band ; outer line marked by a slight grey costal striga, then outbent, bluntly bent at vein 6, then oblique and sinuous inwards, distinct only beyond cell and below vein 3, followed below 3 by a brown band ; a small brown patch above vein 6 before the bend in outer line, which is there edged with golden yellow, and followed by a golden yellow patch speckled with brown and angled externally ; a larger golden yellow patch lies on inner margin before the outer line, traversed by an angled black mark, the yellow becoming brown above towards median vein ; subterminal line represented by a fine curved white line at costa and another above anal angle ; fringe purple.

Hindwing : pearly white with a purplish terminal border containing a brown patch between veins 2 and 3 edged above with whitish ; a white striga above anal angle.

Underside ochreous tinged with purple and grey in forewing ; inner margin broadly white ; outer and subterminal lines deep purple with an orange patch speckled with brown between them beyond cell ; cell-spot dark ; hindwing whitish along inner margin, deep purple on terminal border, and violet purple along costa ; cell-spot large, purple-black ; an outer pale-edged dark line before the border, marked with dashes on the veins.

Head and thorax deep purple ; abdomen ochreous, dorsally tinged with brown ; basal segments and metathorax brown ; venter ochreous ; the legs purplish in front.

Expanse of wings : 26 mm.

1 ♂ from Ninay Valley, Central Arfak Mountains, Dutch New Guinea, November 1908 to January 1909.

This species belongs to the group containing *dinawa* Beth.-Baker, *dinawaensis* Beth.-Baker, and *aureiplaga* Beth.-Baker.

20. *Eleale porphyrina* spec. nov.

Forewing : deep brown dusted in patches with bluish scales ; a deep fulvous red patch on inner margin at base before inner line, and another on costa before

subterminal line; the lines white at costa, becoming dark brown below middle; inner line oblique to median vein, then indented and sinuous; reniform stigma large, oblique, finely edged with white; a short oblique striga from costa above it, produced below it as a brown median shade oblique to inner margin; outer line obscure at costa, marked with white below; subterminal line oblique and white to vein 6, limiting the red patch, then obsolete, appearing again below middle as a double line; fringe black with a white line through it.

Hindwing: white, with broad reddish fuscous terminal border, preceded by a black dash on vein 2 and indented on submedian fold; terminal black lunules defined by white; fringe white with black basal line.

Underside reddish brown dusted with grey, the outer lines white; the hindwing with inner margin white to outer line, with a large red-brown cell-spot.

Palpi deep red-brown with extreme tip white; face, frontal tuft, and thorax ferruginous, brighter in ♀; abdomen red-brown; venter and legs dark brown, the tarsal joints white; pectus and femora white, the spurs tipped with white; antennal tuft yellow ochreous.

Expanse of wings: ♂ 28 mm.; ♀ 30 mm.

1 ♂, 1 ♀ (type) from Fergusson Island, November 1894, and 1 ♀ from Upper Setekwa River, Snow Mountains, Dutch New Guinea, September 1910 (A. S. Meek). This last example has less red, and the white markings more strongly developed.

21. *Eleale costibrunnea* spec. nov.

Differs from *porphyrina* in being much duller and paler; only the costal area of forewing and the basal patch are ferruginous brown, the rest of the wing being dull grey-brown, showing the dark lines more plainly; the underside of both wings dull reddish, white towards inner margin; the head and thorax are more fiery ferruginous.

1 ♂ (worn) from Milne Bay, British New Guinea, January 1899, and 1 ♀ (type) from near Oetakwa River, Snow Mountains, Dutch New Guinea, October to December 1910 (A. S. Meek).

Genus *Aplotelia* gen. nov.

Differs from *Eutelia* in being of stouter build, especially the abdomen, which ends squarely, with a slight projection in middle, the lateral anal tufts inconspicuous; tuft of basal segment of antennae large; thorax clothed with scales, the metathorax crested; antennae of ♂ bipectinate to two-thirds; basal segment of dorsum with a ridge of scales, and slight tufts on anal segments; neuration normal. Type *Aplotelia tripartita* Snell.

22. *Aplotelia nubilosa* spec. nov.

Forewing: grey with a slight brownish or coppery tinge in places; a large blackish blotch on inner margin near base narrowing to a black costal spot, and limited by the black inner line; outer line pale, edged with dark, angled bluntly outwards on vein 7 and projecting between veins 4 and 3, then running in along 3 and vertical to inner margin; the area within it suffused with pale coppery brown; orbicular and reniform stigmata with black outlines, small; the outer line below middle is followed by another line and patches of black-brown suffusion above and below middle; subterminal line pale, preceded by brown shading, and followed

by a small dark apical mark; a triangular area at apex from costa to vein 4 silvery grey; a waved black terminal line; fringe dark grey with pale shining line at base.

Hindwing: white at base, the terminal border broadly blackish; an obscure pale subterminal line, strongest at anal angle.

Underside shining greyish fuscous, the costa of forewing whitish; hindwing white; the costal and terminal borders brownish; the outer line double and dentate; a large black cell-spot.

Palpi with basal segment black, the other two white; face white; tegulae blackish; patagia brown at centre edged with white; thorax and abdomen dark grey, the dorsum blackish.

Expanse of wings: ♂ 32 mm.; ♀ 40 mm.

1 ♂, 1 ♀ from Penaug, 1896 (Curtis).

23. *Eutelia dissimilis* spec. nov.

Forewing: ♂ brown tinged with rosy purple in basal half; space between veins 5 and 6 from reniform to subterminal line pale ochreous with the cross lines subobsolete; submedian fold whitish; veins 1 to 5 rosy ochreous; 6, 7, wholly rosy; subbasal line broken, black edged with purplish pink; inner line bigeminate, outcurved above and below median; the outer lines filled up with ochreous at costa; orbicular stigma small, oblique, ochreous with dark edging; reniform large, narrow, its upper extremity projecting externally, brown at centre with ochreous outline, preceded by a diffuse dark brown median shade, which beyond the stigma is narrower, brown, and bent, then inwardly oblique; outer line double, starting from an inwardly oblique ochreous costal striga, strongly outbent below costa, then dentate-lunulate, more distinct towards inner margin, where it is preceded by a brown shade, inwardly edged by a black line from cell to inner margin; subterminal line ochreous, clearest at each extremity, crenulate towards costa and curved at inner margin, preceded at costa by a brown and followed at apex by a black patch; a thick brown terminal line; fringe ochreous at base, the tips brown.

Hindwing: ochreous with broad greyish fuscous terminal border; terminal line black, interrupted by the pale veins and preceded by a pale ochreous line interrupted by a black blotch on vein 2; fringe ochreous with dark tips.

Underside of forewing yellow ochreous suffused with dull rosy, the cell fuscous; of hindwing ochreous with large black cell-spot; the costal and terminal borders rosy.

Palpi ochreous, externally brown; face brown; thorax a mixture of brown and purple; abdomen ochreous with base and extreme tip ferruginous brown; pectus and femora bright rosy; tibiae fringed with brown.

♀ very different: *forewing* with the whole basal area ochreous suffused with deep rosy; space between inner and outer lines filled up with fuscous and brown, the inner half darkest; outer line angled on vein 5; space between it and subterminal line pure ochreous; terminal area rosy brown with some dark scaling at apex.

Tegulae, inner margin of patagia, and metathorax black; patagia externally pale, in the middle with a tuft of ochreous mealy scales; face ochreous; abdomen ochreous with the middle segments black; underside of body and legs as in ♂, but the abdomen laterally towards base glossy whitish.

Expanse of wings: 40 mm.

1 ♂, 3 ♀ from Ninay Valley, Central Arfak Mountains, Dutch New Guinea, 3500 feet, November 1908 to January 1909.

24. *Targalla strigilipennis* spec. nov.

Forewing: grey suffused with purplish violet; the lines blackish, wavy; the whole basal half of wing to median line suffused with purplish black, in which the subbasal, inner, and median lines are visible, the space between the two last forming a black band; the reniform stigma oblique, irregular, with interrupted white outline edged with black, its centre rufous; sometimes a minute white dot in cell on the black band; outer line double, black, regularly crenulate, bent on vein 6, thicker and blacker above middle; followed by a second, much finer, double black line, lunulate-dentate, the teeth marked by white points on the veins; subterminal line black above middle, starting from a black costal triangle, indented on both folds; terminal line black, with white dots at the end of veins; fringe purplish.

Hindwing: brownish fuscous, in ♀ with the base slightly paler, in the ♂ with the area between veins 2 and 6 subhyaline with the veins dark, the costal and terminal areas narrowly fuscous; the inner margin and vein 2 thickened with black and vinous scales in both sexes; the fringe vinous; the terminal line as in forewing.

Underside blurred fuscous in forewing with the outer and subterminal lines dark; the costa and terminal third tinged with vinous; hindwing paler tinged with vinous in costal half and terminal third in the ♀ with large black cell-spot and three blackish wavy lines; whitish in ♂ with lines and cell-spot plainer and much less red suffusion.

Head, palpi externally, and thorax fuscous and ochreous mixed with vinous; palpi internally ochreous; dorsum dark fuscous grey, the anal segment tinged with vinous; venter and pectus tinged with vinous.

Expanse of wings: ♂ 28 mm.; ♀ 28-32 mm.

2 ♂♂, 3 ♀♀ from Humboldt Bay, New Guinea, September-October 1892, (W. Doherty).

25. *Targalla carnea* spec. nov.

Forewing: flesh-colour, diluted with greyish when worn; inner line dark grey, blackish at each end; oblique outwards to cell, there roundly bent and oblique inwards, edged with whitish, inwardly above, outwardly below middle; inwardly preceded by grey suffusion, outwardly with deeper flesh-colour; outer line oblique to vein 6, edged by a grey-green bar, then fine and sinuous, ending in a black spot on inner margin; the costal bar is followed by a deep brick-red triangle edged with white, from the apex of which on vein 6 a sinuous red shade rises before the ill-defined subterminal line; cell-spot a deep red lunule preceded by a finer white one; the apex paler or altogether grey.

Hindwing: with basal half pale, terminal half flesh-colour, sometimes with a paler subterminal line limiting a somewhat darker subterminal band; some dark scaling along vein 1 at end; fringe pale with a darker grey dividing line.

Underside ochreous tinged and speckled with pink, except the inner margins, which are whitish; the outer lines only indicated.

Head, thorax, and abdomen flesh-colour; pectus paler; tarsi with white joints.

Expanse of wings: 22–24 mm.

Several ♀♀ from Ajmere, 1892.

This species may require a new genus: it agrees with *Phlegetonia* in not having any crests, neither do the insects appear to have a frontal tuft.

26. *Chlumetia apicenigra* spec. nov.

Forewing: ochreous suffused with grey and brownish and with patches of olive fuscous; subbasal line double, black, excurved below costa and oblique inwards; inner line obscurely double, oblique and straight outwards, meeting subbasal line in cell and forming an A-shaped mark, interrupted on subcostal vein; orbicular stigma a flattened oval with dark outline; reniform oblique, oblong, its centre dark brown ringed with white and outlined with black; space on costa between the rise of median and outer lines olive fuscous; the median diffuse, curving round cell; outer line double, blackish, dentate outwards on veins 8, 6, 4 and 1, the teeth pale, that on vein 1 white and conspicuous, followed by a pale brown white-edged shade, which below vein 3 forms an olive fuscous band; a blackish apical triangle, containing a white striga and dot below it; the subterminal line whitish, sinuous, broader beyond the olive fuscous band at inner margin, and crossed by a curved fuscous mark above vein 4; black terminal lunules emitting black rays beyond veins across the rufous fringe.

Hindwing: white in basal third, the rest dark fuscous, with traces of a whitish subterminal line from anal angle; terminal lunules and fringe as in forewing.

Underside of forewing ochreous suffused with brownish grey; of hindwing whitish striated with dark, containing a dark cell-spot and four dark outer lines of which the innermost is straight, but angled in middle, and the next dentate-lunulate.

Head, tegulae, patagia, and dorsum brownish; thorax and basal segments of dorsum whitish.

Expanse of wings: 24 mm.

1 ♂ from Waterfall Valley, Penang, February—March 1898 (Curtis).

Very close to *C. lichenosa* Hmps. from Mashonaland.

27. *Anuga insuffusa* spec. nov.

Differs from *A. multiplicans* Wlk. in being uniform grey, without dark suffusion along costa and inner margin; the lines and stigmata much the same; the hindwing with a pale subterminal line expanding towards anal angle and with ferruginous scales intermixed.

Underside of forewing grey, of hindwing whitish dusted with grey; crossed by three curved dark lines, inner, outer, and subterminal, and with a large black spot on discocellular.

Head, thorax, and abdomen all grey; pectus pale ochreous.

Expanse of wings: 48 mm.

1 ♂ from Sandakan, Borneo (type); 1 ♀ from Penang, January—April 1898, (Curtis). Both examples are somewhat damaged and frayed, but are certainly different from *multiplicans*.

28. *Anuga rubristigma* spec. nov.

Forewing: uniform grey, like *insuffusa*, speckled and tinged with black; inner line double, waved, oblique inwards below middle; outer line very ill-defined at costa, below vein 6 dentate-lunulate, oblique parallel to termen; subterminal pale, preceded by thick diffuse black scaling, except on cell-fold; dentate inwards on submedian fold, the curve below it tinged with ferruginous; terminal area dark; a black dot in cell and an ill-defined reniform stigma at end, filled up with ferruginous red.

Hindwing: grey in basal half, suffused with blackish in outer area, with a pale grey subterminal line, tinged with ferruginous between veins 2 and 4; the space below submedian fold dull grey with the cross-markings obsolete.

Underside of forewing dark grey, of hindwing paler speckled with dark, in basal area whitish; a thick outer line and subterminal shade; cell-spot small and black.

Palpi and forelegs ferruginous; face, tegulae, patagia, and dorsum grey with an admixture of ferruginous in places; venter whitish.

Expanse of wings: 36 mm.

1 ♀ from Mt. Marapok, British North Borneo.

Distinguished from the other species of the genus by its shorter and broader wings, and from its nearest allies by the red-filled reniform stigma, without black lateral bars; antennae broken.

SUBFAMILY STICTOPTERINAE.

29. *Stictoptera mimica* spec. nov.

Paler in both sexes than *striata* Hmps.; the ♀ pale ochreous tinged with brownish, the ♂ suffused with pale reddish; a fine dark brown streak from base along median vein; the costal area more or less suffused with brown in the ♀ and red-brown in the ♂, leaving the veins finely pale; the dark streak from vein 4 at termen to near base of inner margin much narrower and more condensed, less diffuse inwardly; a dark spot at lower angle of cell and dot between veins 3 and 4 at base; subterminal line wavy, whitish, sharply inangled below costa, and more strongly developed below middle as the edge of the black streak; hindwing as in *striata*; patagia concolorous with ground colour of forewing.

Expanse of wings: ♂ 46 mm.; ♀ 42 mm.; a small ♀ from Bougainville 36 mm. only.

Besides the difference in coloration the forewing is narrower than in *striata*.

Rossel Island, Goodenough Island, the Solomons, and New Guinea (types).

The ♀, in the forewing, is a good mimic of *Cucullia lychnitis*.

30. *Stictoptera whiteheadi* spec. nov.

Forewing: pale brownish ochreous; costa at base shortly purplish; the middle third smoky purplish above subcostal vein with three darker spots; a curved dark streak from base along vein 1 to inner line; reniform large, but the outline excessively indistinct, a brown spot in its lower part; outer line double, outcurved, lunulate-dentate, the inner arm brown, the outer purplish black; the teeth well marked on the veins; a brown shade along inner margin from vein 3 to inner line; veins towards termen brown; subterminal line waved, ochreous,

limiting the purplish black terminal area, separated from outer line by a broad ochreous band, which is tinged with brown before the subterminal line; a row of dark ochreous-edged terminal lunules; fringe ochreous with dark middle line.

Hindwing: hyaline whitish; the costal area more narrowly and the terminal broadly fuscous, with traces of a darker subterminal band; veins and cell-mark dark.

Underside ochreous, tinged, especially towards termen, with olive grey; the median and outer lines well marked, and the cell-spot of hindwing.

Head, thorax, and abdomen ochreous; palpi externally black; face with a blackish bar; tegulae and patagia tipped with blackish; dorsal segments tinged with grey with slight black central tufts; venter and pectus ochreous; forelegs black in front.

Expanse of wings: 42 mm.

1 ♀ from Mt. Dulangan, Mindoro, Philippines, 4500 to 5500 ft., November 1895 to January 1896 (J. Whitehead).

Allied perhaps to *microthyris* Hmps. from New Guinea.

31. *Stictoptera ochreigrisea* spec. nov.

Forewing: with basal area pale ochreous tinged with brownish, with a short ferruginous streak from base along median vein and another further from base along costal vein; the rest of wing whitish grey with darker grey reticulations, and below middle irregularly suffused with brownish grey; the edge of the ochreous basal area is oblique inwards but indefinite; the outer line is black, forming an indented crescent from vein 6 to 4, then incurved and formed of contiguous lunules; the reniform is a whitish black-edged, loaf-shaped figure, preceded by a short white dash in cell, lying within the ochreous area of the base; costa with some short brown spots and a larger one before apex, from which the indistinct subterminal line starts; fringe grey-brown.

Hindwing: dull whitish with blackish veins and broad terminal border.

Underside grey, the costa of forewing olive yellow.

Palpi long, brown externally; face whitish above, below without scales; basal tuft of antennae pale brown; tegulae and patagia white streaked with brown; metathorax dark grey; dorsum grey, with tufts reddish; pectus and legs yellow ochreous, the legs tinged with grey.

Expanse of wings: 34 mm.

1 ♂ from the Upper Setekwa River, Snow Mountains, Dutch New Guinea, September 1910 (Meek).

32. *Stictoptera obliquitaenia* spec. nov.

Forewing: grey tinged with brown; the lines indistinct, wavy, darker brown, claviform stigma marked by a small black spot at extremity; orbicular and reniform with brown centres and dark outlines, the reniform large; costa marked with grey spots at origin of the lines; outer line lunulate-dentate, brown with white on each side, visible only in costal half of wing; a broad brown diffuse fascia oblique from apex to inner margin effaces the lower part of outer line and upper part of subterminal; small black subterminal dots.

Hindwing: with basal area hyaline white; the inner margin smoky fuscous; veins black; cell-spot fuscous; a broad fuscous terminal border; fringe whitish.

Underside grey with brownish fuscous suffusion.

Head and thorax grey-brown; the dorsum grey, with anal segment pale.

Expanse of wings: 42 mm.

1 ♂ from near Octakwa River, Snow Mountains, Dutch New Guinea, October to December 1910 (A. S. Meek).

33. *Lophoptera khasiana* spec. nov., and ab. *coerulescens* ab. nov.

In *Cat. Lep. Phal. B.M.*, vol. xi, p. 189, Hampson described a *Lophoptera luctuosa* from a single ♀ from Ceylon, which is figured on Plate 179, f. 3. The Tring Museum contains seven examples, belonging apparently to three separate species, all possessing the characteristic dull yellow spots at apex and tornns of forewing which are seen in *luctuosa*, but differing in other respects, and in two cases having an aberration caused by a suffusion of bluish white scales on the forewing. In the two examples from the Khasia Hills, both ♂♂, the basal area is of the same dull brown as the rest of the wing; the dark median line is bluntly bent outwards above and below the median vein, and is preceded by small slightly raised tufts of dark scales on the two folds; the outer line is double, moderately dentate-lunulate, the lunules being filled in with dull orange; the subterminal is formed by blackish wedge-shaped marks externally edged with dull orange, that above vein 7 being displaced basewards, as in all the species, and filled in with clearer orange; the terminal lunules all inwardly edged with whitish; the hindwings in all the species, as in *luctuosa*, brownish fuscous; in the aberration *coerulescens* ab. nov. a spot in cell touching inner line, a semicircular patch at middle of cell, and an oblong oblique blotch below it running to outer line, the outer line itself, and a suffusion before it from vein 4 to 7, are all pale bluish. The undersides in this and all the other species agree with that of *luctuosa*.

34. *Lophoptera malayica* spec. nov. and ab. *pallidifusa* ab. nov.

Of three examples from Penang, the two typical, a ♂ and ♀, are distinguished from *khasiana* by the acutely serrate outer and subterminal lines, the teeth of which are filled in with yellow and white; the inner line is somewhat more conspicuous; and the dark median line runs obliquely straight to the submedian fold, where it is angled and bent inwards towards base, preceded on both folds by small tufts of scales; the terminal lunules internally edged with yellowish; in the third specimen, a ♂, ab. *pallidifusa* ab. nov., the whole forewing, except a narrow irregular costal space and the terminal area beyond outer line, is suffused with whitish blue scales, the space immediately below the median vein being pale ochreous and running out between veins 3 and 4 as a streak to subterminal line; the terminal lunules edged inwardly with yellowish white.

35. *Lophoptera albilinea* spec. nov.

The whole forewing uniform dark brown, with no distinct median line or tufts of scales: inner line snow white, straight, curving inwards only at inner margin, slightly crenulate; reniform stigma a large dull orange patch; outer line double, lunulate dentate, filled in with dull yellow; the apical spot whiter; the subterminal line obscure; hindwing paler, bronzy brown.

1 ♀ from Batchian, March 1892 (W. Doherty).

36. *Lophoptera flavina* spec. nov.

Forewing: purplish brown over a ground colour of brownish ochreous, which appears only in an oblique band preceding outer line; lines black, double, filled in with dull gilded yellow; the inner broad, vertically sinuous, with a dash of brighter yellow above median vein; outer line obliquely sinuous; reniform stigma with leaden grey centre ringed with yellow and outlined in black; the veins across the brown band darkened; subterminal line pale, externally black-edged; another similar line between it and the outer line; a black terminal line interrupted at the vein-ends.

Hindwing: hyaline yellowish; terminal border purplish fuscous.

Underside bronzy purplish, the basal half of hindwing yellowish, the costa dusted with fuscous.

Head, thorax, and basal segments of dorsum purplish brown; abdomen below and at sides yellowish, tinged with dark brown on dorsum; legs in front and palpi purplish brown.

Expanse of wings: 21 mm.

1 ♀ from Ramboekers, Tondano (Weigall).

37. *Lophoptera albigrisea* spec. nov.

Forewing: whitish grey suffused with darker grey and in parts slightly with pale brown; the markings blackish fuscous; a roundish black patch at base not reaching below vein 1, bounded by a curved pale space with the black inner line at its middle, followed by a dark area, black on costa before the white reniform, which has two black dots at its lower end, and expanding into a fuscous triangular blotch that reaches subterminal line on inner margin; outer line black, lunulate-dentate, the area beyond the reniform whitish, washed beyond cell with pale brownish; subterminal line pale, between dark shades, except beyond cell, these on costa strongly marked and blackish; black terminal lunules interrupted by pale grey dots; fringe grey.

Hindwing: greyish fuscous, deeper towards apex, with traces of dark outer and subterminal lines.

Underside fuscous; costa of forewing whitish with blackish striae; both wings with dark median and outer lines and dark terminal border.

Head, palpi, and tegulae black-brown; thorax and abdomen grey; the dorsum with black marks.

Expanse of wings: ♂ 30 mm.; ♀ 38 mm.

3 ♂♂, 2 ♀♀ from the Khasia Hills, Assam.

Allied to the group containing *chalybea* Wlk. and *luctuosa* Hmps.

38. *Lophoptera coagulata* spec. nov.

Forewing: dark purplish fuscous on a pale brown ground, which is visible as a diffuse triangular marking only on costa beyond middle; inner line double, waved, dark filled in with pale brown, toothed outwards on subcostal, and rather strongly angled outwards on median vein, then oblique inwards; outer line also double, lunulate, bent inwards below middle to touch the lower end of reniform, then outcurved again; reniform indistinct, with a slight interrupted pale annulus and black outline; subterminal line with dark shades on each side followed beyond cell

by a short white line, somewhat dentate below costa and creulate in lower half; terminal line black, with ochreous dots beyond veins.

Hindwing: with broad black terminal border and hyaline basal area, better defined than in *leucostriga* Hmps.

Head, thorax, and abdomen dark brown.

Expanse of wings: ♂ 24 mm.; ♀ 26 mm.

1 ♂, 1 ♀ (types) from the Khasia Hills; and 1 ♂ from near Manilla, the Philippines.

In the subspecies *nigriplaga* subsp. nov. the space beyond inner line is occupied by an oblique blackish blotch; the example, a ♀, is from St. Aignan.

39. *Lophoptera sordida* spec. nov. and ab. *bimaculata* ab. nov.

Forewing: ♂ dingy brownish ochreous; the costal streak darker, grey-brown; a dull brown patch at base of inner margin; inner line double, brown, strongly sinuous; median just beyond it, marked with black points; both median and inner lines much nearer base than usual; outer line strongly obtuse below costa, then angled, and running oblique and straight, strongly dentate-lunulate to inner margin; orbicular stigma pale, large and somewhat flattened; the reniform large with a brown lunular centre, outlined laterally with black spots; subterminal line pale brown between two series of dark brown lunulate markings, the veins between them dark brown; the lunule between veins 4 and 5 before subterminal line blackish; terminal line black, interrupted by pale brown dots beyond the veins; fringe white, rayed with black beyond the veins.

Hindwing: black-brown, the fringe brownish ochreous; basal area slightly paler.

Underside dull olive fuscous with darker bands and paler intervals.

Head and thorax concolorous with forewing; abdomen with hindwing, but the centre of dorsum is narrowly pale brown; venter pale ochreous; legs grey-brown with the joints pale.

♀ much paler, ochreous or brownish ochreous, with the markings clearer; the hindwing pale greyish fuscous with darker veins; the parts of the body proportionally paler.

The paler ochreous of the 2 ♀♀, marked on the forewing with two large black patches, one on the submedian fold before middle, the other beyond middle between veins 2 and 4 on the outer line, may be distinguished as ab. *bimaculata* ab. nov.

Expanse of wings: 30 mm.

3 ♂♂, 2 ♀♀ from the Khasia Hills.

40. *Lophoptera brunneata* spec. nov.

Forewing: ♂ dull red-brown, the marginal areas all blacker and diffuse; three or four waved dark lines at base, dentate inwards on median vein; inner line double, black, angled outwards on each fold, inwards on median vein and vein 1; a black spot between the arms on submedian fold; median line black, parallel, touching the reniform which is oval, oblique, outlined in black; its lower half acutely serrate, like the double black outer line and the two following it before the subterminal line which ends at anal angle in a white spot; a thick black terminal line with pale dots beyond veins; fringe iron-grey.

Hindwing: with intervals in, beyond, and below cell dull hyaline, also that above vein 1; the veins blackish; terminal border broadly black, its inner edge diffuse; fringe dark at base, white at tips, slightly crenulate.

Underside of both wings bronzy fuscous, the hyaline area of hindwing bluish white.

Head, thorax, and abdomen black-brown; metathorax and dorsal tufts grey; venter and legs blackish; a whitish scale-fan beneath patagia.

The ♀ is brighter brown, with less black suffusion, that on costa forming a diffuse dark blotch in middle.

Expanse of wings: 34 mm.

3 ♂♂, 1 ♀ from New Guinea; 1 ♂ from Mt. Goliath; 1 ♂ (type) from Kumasi River; 1 ♂, 1 ♀ from Upper Setekwa River; this last ♂ shows hardly any brown, owing to the thick purple-black suffusion.

41. *Lophoptera albistellata* spec. nov.

Forewing: reddish brown, the ground colour to a great extent obscured by the numerous black lines and shadings; a thick black shade along inner margin to outer line; subbasal and inner lines black, double, dentate on subcostal and median veins, on submedian fold and below vein 1; some blackish blotches in cell; median line double, strongly excurved beneath costa, then concave outwards to vein 4, insinuate and angled outwards on vein 1; veins 3 and 4 black before it; outer line double, black, excurved above, indented on median vein, lunulate-dentate, incurved below 4, followed by a black sharply dentate line, the inward teeth of which are marked by white scales, that between veins 4 and 5 by a round white spot; subterminal line pale followed by small brown patches which beneath costa are sharply dentate; a row of conjoined double black lunules along termen separated by yellowish dots; fringe brown, crenulate.

Hindwing: hyaline white in basal half, with deep black terminal border; costal and inner margins narrowly blackish; veins black; fringe brown at base with the tips white.

Underside of forewing brown, with the markings and veins black; of hindwing as above.

Head, tegulae, and patagia brown-black; thorax and basal half of dorsum red-brown and grey, rest of dorsum blackish; the tufts rufous grey; venter pale grey; legs black, paler at the joints.

Expanse of wings: 34 mm.

1 ♀ from near the Oetakwa River, Snow Mts., Dutch New Guinea, October to December 1910 (A. S. Meek).

42. *Lophoptera torrens* spec. nov.

Forewing: chestnut brown, the basal patch rounded and edged by a white line; a large triangular patch on costa reaching nearly to apex and to submedian fold below; separated from basal patch by a large triangular space of grey streaked with brown, rising from a narrow neck at costa and extending along inner margin from near base to near tornus; outer line very indistinct, double, brown, strongly bent outwards to vein 6, then incurved and sinuous to submedian fold, where it is again outcurved across submedian interspace and bent inwards to inner margin; it is followed closely from vein 6 to submedian fold by a white line with a white spot

above it; terminal area white, filled up with pearl grey, the white intruding at the vein-ends through the thick black terminal line; fringe brown, the outer half chequered with paler; reniform stigma large, brown edged with black.

Hindwing: dark bronzy brown, the terminal border broadly blackish; the fringe white at tips.

Underside fuscons, darker along termen, with traces of three darker lines.

Head and thorax brown, the metathorax showing traces of fulvous scales; abdomen blackish, with a rufous grey dorsal stripe, broad at base and narrowing off to a point before anus; venter whitish; legs brown, with the joints and spurs whitish.

Expanse of wings: 28 mm.

1 ♀ from Kuching, Borneo. Unlike any other known species.

SUBFAMILY SARROTHRIPINAE.

43. *Nanaguna quadrifera* spec. nov.

Differs from *N. variegata* Hmps. in being larger; all the blackish blotches more ample; the basal blotch not merely edged with darker, but filled in with blackish; the blotch on inner margin at middle not triangular, but erect and oblong; the inner pale band not straight, but bent below middle; the pink lines and tints much stronger.

2 ♂♂, 4 ♀♀ (very large) from Mt. Goliath, Dutch New Guinea, February 1911 (A. S. Meek). Specimens of the Indian species *variegata* Hmps. also occur in New Guinea; examples from Kumasi River and Haidana, Collingwood Bay, are in the Tring Museum.

44. *Gyrtothripa semiplumbea* spec. nov.

Forewing: leaden grey, darker along costa and with slight black dusting; inner line white finely edged with black, straight and oblique from costa to submedian fold, contiguous to a dull yellow band with leaden central line, which is bent on median vein, the two running vertically and obscure from fold to inner margin; a brown-black blotch on costa reaching median vein, containing two or three yellowish streaks and laterally dark-edged, followed by another dull yellow band with leaden centre to vein 6, where it runs outwards, emitting two or three yellowish streaks to apex, then forming a large curve concave outwards to vein 4, below which it becomes lunulate-dentate and vertical; beyond the curve another brown-black blotch with dentate yellow line through it; a whitish irregularly crenulate subterminal line, indented at middle, and followed above middle by a narrow brown-black terminal area; terminal line finely black; fringe leaden grey.

Hindwing: whitish, semihyaline, with the apex greyish in ♂; brownish, with the whole termen grey in ♀; veins dark in both sexes.

Underside of forewing grey, except inner margin; of hindwing whitish.

Head and palpi dark grey, the palpi internally white; tegulae grey mixed with ochreous, with a broad black band; patagia and metathorax black-brown; thorax and inner lower edge of patagia mixed ochreous brown and whitish; dorsum grey tinged with brown; venter, pectus, and legs internally white; legs externally dark grey.

Expanse of wings: 28 mm.

1 ♂, 1 ♀ (types) from Mt. Goliath, Dutch New Guinea, February 1911; 1 ♀ from near Oetakwa River, October—December 1910; 1 ♀, Goodenough Island, April 1913 (A. S. Meek).

SUBFAMILY ACONTIANAE.

45. *Westermannia ossicolor* spec. nov.

Forewing: dirty bone-colour, minutely blackish-speckled; a dull brownish flush beyond cell running to termen and apex; a black dot at lower angle of cell placed in an unspckled space; lines indistinct and interrupted; the outer from costa at two-thirds outwardly oblique, bluntly bent beyond cell, then inwardly oblique and plainer, but obsolescent below vein 1; subterminal line irregularly crenulate, inangled on vein 5, ending in a grey-brown cloud on inner margin; black terminal dots; fringe brownish grey; traces of a short black dash at base of cell.

Hindwing: dull bone-colour, with the veins darker; the terminal area grey-brown, varying in extent and depth.

Underside bone-colour, suffused in forewing with fuscous grey, except on costa and beyond the middle; in hindwing terminally only.

Head, thorax, and abdomen whitish bone-colour; the thorax and patagia black-speckled; legs, especially the tarsi, black-speckled; fore-coxae and femora internally fuscous.

Expanse of wings: 46 mm.

1 ♂ from Arawa, Bongainville, Solomon Islands, December 1907 (type); 1 ♂ from Kulambangra, Solomon Islands, March 1901 (A. S. Meek).

Less glossy than other species and without distinct markings; nearest to *W. longiplaga* Beth.-Baker.

46. *Westermannia semifusca* spec. nov.

Forewing: like *argentea* Hmps., but the basal two-thirds paler lilac grey, the dark terminal area much broader; costal edge to outer line white; inner-marginal streak from base to outer line below vein 1 pale fulvous speckled with black, instead of being cream-colour.

Hindwing: deep brownish fuscous with veins and termen still darker, and the tips only of fringe white.

Underside glossy brownish fuscous; the costa of forewing narrowly, of hindwing broadly pale; hindwing with large dark cell-blotch.

Palpi white speckled with black towards tips, wholly black above; face white with a black ring and dots; vertex white; thorax, shoulders, and patagia pale fulvous speckled with black; dorsum fuscous; venter, legs, and pectus white; forelegs with the coxae purple black, the other segments white, speckled and spotted with black.

Expanse of wings: 44 mm.

1 ♂ from Goodenough Island, 2500 to 4000 ft., May 1913 (A. S. Meek).

47. *Westermannia ichneumonis* spec. nov. and ab. *flavipuncta* ab. nov.

Forewing: bright greyish ochreous speckled with brown, most thickly along costa and towards inner margin; the dark purplish red-brown figure assumes the shape of the head of an ant-eater, its edges brightly defined by whitish; the

reniform stigma is a deep brown lunule with lustrous outline, separated by a plumbeous space from the sinuous bluish white outer line.

Hindwing: white with veins and terminal area fuscous.

Head and thorax greyish ochreous with fine dark speckling; the dorsum grey without speckling.

Underside of forewing ochreous with the dark figure showing through; of hindwing white with dark border narrower.

Expanse of wings: ♂ 30-34 mm.; ♀ 36 mm.

New Guinea: Milne Bay (type); Upper Setekwa River; near Oetakwa River; Ninay Valley; Fergusson Island; Kiriwini; Goodenough Island; Rook Island.

The aberration *flavipuncta* shows a yellow spot between veins 2 and 3 below cell. All these specimens are males.

48. *Westermannia cornucopia* subsp. *ocellata* subsp. nov.

Differs from the type form from S. India in being slightly smaller, the ground colour paler; below the silvery blue-edged reniform, between veins 2 and 3, is a small round spot of the pale ground colour; the outline of the dark brown figure is more regularly and smoothly curved.

1 ♀, 2 ♂♂, all from the Khasia Hills, Assam.

49. *Westermannia tapiri* spec. nov.

Differs from *cornucopia* Hmps. in the top of the brown figure touching the costal edge, the outer half of the costal area being itself suffused with pale grey-brown; the inner edge of the brown mark is always insinuate in cell, and its lower extremity, which is more curved round outwardly, does not reach below vein 1; neither the reniform stigma nor veins 3, 4 and the median vein are defined by bluish; the outer line is whitish, not blue, and runs first obliquely outwards to vein 8, then vertically with a slight bend in cell to the pale sinus below the brown figure; a dark subterminal crenulate line is visible; a row of black dots before termen; hindwing whitish, the termen diffusely dark.

3 ♂♂ from St. Aignan, August and October 1897 (type), and 2 ♂♂ from Fergusson Island, September and October 1894 (A. S. Meck).

50. *Westermannia argentea* Hmps., subsp. *suffusa* subsp. nov.

Forewing: wholly suffused, except the cream-white inner-marginal streak, with dark bronzy fuscous, obscuring the markings.

Hindwing: more solidly fuscous.

2 ♀♀ from Merkara, July 1903 (type) and October 1904; 1 ♀ from Travancore (Place); and 1 ♂ (worn) from Pirmád, S. India.

51. *Westermannia argentea* Hmps., subsp. *renifera* subsp. nov.

Like the preceding, but the triangular space between subcostal vein and vein 1 as far as subterminal line suffused with brownish olive, obliterating all markings except the dark oval reniform stigma edged with whitish; hindwing as in typical *argentea*.

2 ♀♀ from Port Blair, Andamans, December 1904—January 1905.

52. *Westermannia breviceps* spec. nov.

Nearest to *W. tapiri*, but differing in the dark figure of outer half being deep purplish fuscous instead of brown, broadly defined throughout with whitish; its inner edge strongly curved, without indentation in cell; its lower extremity appearing shorter and stouter, with the sinns before it shallower; hindwing whiter, with the termen fuscous and the veins dark.

1 ♀ from Rook Island, July 1913 (A. S. Meek).

53. *Westermannia columbina* spec. nov.

Forewing: sandy grey speckled and suffused with brown; the dark figure of outer half assuming the shape of a pigeon's head and neck, with a large oval snow-white blotch at end of cell for the eye, separated from the sinuous pale outer line by a leaden blue space, the median vein and veins 3 and 4 also being bluish, as in *cornucopia*.

Hindwing: brownish fuscous.

Underside bronzy brown with the white reniform of forewing showing through. Head, thorax, and abdomen sandy grey speckled with brown.

Expanse of wings: 30 mm.

1 ♀ from Gunong Ijau, 2000 to 3000 ft., March 1898 (Butler) (type); 1 ♀ from Rnkít Putus, Selangore, 3000 ft., May 1906 (Curtis), Malay Peninsula.

SUBFAMILY CATOCALINAE.

54. *Catocala fugitiva* spec. nov.

Forewing: grey with a tinge of olive brown; subbasal line fine, oblique below middle; inner line oblique, excurved above and below middle and again below vein 1, dentate inwards on the median and vein 1, preceded by an olive brown clouding which leaves a narrow pale space before the line; a black streak from subbasal line below middle running into the cloud; outer line black, shaped as in *timur* Bang-Haas, preceded above and below the pale intrusion of the outer line by olive brown shading, which somewhat obscures the reniform stigma; this has its centre brown, ringed with pale and outlined with black; subterminal line pale, zigzag, edged by a sharply zigzag black line and separated from outer line by a brownish dark-edged shade; a slight dark oblique streak from below apex; terminal line of black lunules; fringe grey with tips paler; beyond the inner line an oblique pale band from costa meets the pale intruding arm of outer line.

Hindwing: rather pale red; the terminal border black, inwardly toothed on vein 2, with a sinus of red across submedian interval nearly interrupting it; apex and fringe white; inner band narrowing from costa to vein 1 curved, not angled.

Underside white, the inner-marginal half of hindwing tinged with rosy; an oblique blackish band from near base of forewing meets a curved black band from the middle; a broader outer black band leaves the apex and fringe grey; hindwing with the median band bent inwards to inner margin, which is narrowly blackish; terminal band as above.

Head, thorax, and abdomen grey, the latter brown tinged, without dark

dusting, the two former dusted with black; the tegulae and patagia with a black line in front; pectus and venter whitish; legs dusted with black atoms, the tarsi mottled black and white.

Expanse of wings: 60 mm.

1 ♀ from Baigam, Syr Daria, June 1911 (Koshantschikoff).

Distinguished by the black streak from subbasal line, and the narrow curved median band of hindwing.

55. *Melipotis designata* spec. nov.

Forewing: pale grey, without darker dusting or striation, in the median area between inner and outer lines tinged with pale lavender, in the terminal with pale brown; basal area black-brown, limited by a deeper inner line, which below vein 1 is excurved and edged with white; the inner margin from base of median vein to lower extremity of basal patch pale mixed with brown and fuscous scales; reniform stigma narrow and elongate, of the ground colour, with a minute white dot at top and bottom, sometimes outlined with pale; a small brown spot below it on vein 2 and a larger one obliquely below it on submedian fold, indicating a median shade; outer line black, subobsolete between the two folds, marked by a brown spot on the lower, followed on costa by a large triangular black-brown blotch with an oblique pale patch at middle; a black spot on submedian fold representing subterminal line; some slight black terminal dots, plainest at anal angle; fringe rufous brown.

Hindwing: dull blackish, with a pale median streak forming an elongate white blotch from vein 5 to 2 and a smaller indistinct spot towards anal angle; fringe black, white from vein 7 to 5 and from vein 1 to 2.

Underside dull blackish with a complete broad white streak preceded by a black one across middle of both wings; the base of hindwing and apex of forewing paler.

Head and palpi greyish fuscous mixed with brown; shoulders and patagia pale brown tipped with fuscous; abdomen grey, the basal tuft brown.

Expanse of wings: ♂ 42 mm.

3 ♂♂: 2 from the Ninay Valley, Central Arfak Mountains, Dutch New Guinea, 3500 ft., November 1908 to January 1909 (type); and 1 from the Upper Aroa River, British New Guinea, March 1903 (Meek).

Allied to *M. kebea* Beth.-Baker, but smaller, more neatly marked, and without dusting and dark suffusion.

56. *Melipotis kebea* ab. *nigristriata* ab. nov.

Differs from the type form in having a long diffused black streak along submedian fold from base to termen, before which it becomes fainter.

2 ♀♀ from the Upper Aroa River, British New Guinea, March and April 1903; 1 ♀ from Biagi, Mambare River, British New Guinea, April 1906 (A. S. Meek).

The ♂♂ of this species are rare; in the Tring Museum are 11 ♀♀ but only 1 ♂; in the British Museum collection there is a single ♀. The species was originally described from New Guinea; in the Tring series are 2 ♀♀ from North Borneo, and 2 from North Queensland, the last rather larger than the New Guinea examples.

57. *Pterocyclophora albiapicata* spec. nov.

Nearest to *Pt. huntii* Warr. from New Guinea and the Kei Islands.

Forewing: in the ♀ more suffused with ochreous, as in a ♀ from the Kei Islands in the Tring Museum and in 2 ♀♀ from New Guinea; in the ♂ darker, more purplish tinged; the outline and centre of the reniform stigma whitish, its lower inner edge running inwards and forming an acute angle with the median vein; the subterminal line runs vertical from inner margin to submedian fold, then straight to vein 7, not flexuous as in *huntii*.

Hindwing: of ♀ without the broad black costal blotch, the double dark subterminal line ending diffusely before the distinct white apical blotch, both in the ♀ and ♂.

Expanse of wings: ♂ 70 mm.; ♀ 80 mm.

A pair from Kulambangra, Solomon Islands, March 1901 (A. S. Meek).

SUBFAMILY NOCTUINAE.

58. *Anophiodes concentrata* spec. nov.

Forewing: resembles *Anophiodes meeki* (*Catephiodes*) Beth.-Baker, but smaller; the subterminal line less strongly marked, more fulvous than orange, and not connected by a pale mark with the white-edged fulvous lunule occupying the fringe between veins 3 and 4.

Hindwing: with the large snow-white basal area reduced to a bluish white central patch lying between the two folds.

Underside of forewing without a white curved band; of hindwing with the white central patch much restricted; mid- and hind-femora and the pencil of hairs in hind-tibia of ♂ deep yellow ochreous.

Expanse of wings: ♂ 44 mm.; ♀ 50 mm.

A pair from Biagi, Mambare River, British New Guinea, 5000 ft., April 1906 (A. S. Meek).

59. *Aedia nigrijuncta* spec. nov.

Forewing: pinkish ochreous suffused with grey; a slight dark cloud along base of costa and another on inner margin near base; inner line vertical, consisting of three curves, toothed inwards in cell and on vein 1; outer line double, the inner arm fine, brown, the outer grey, thicker, sinuous to vein 4, then incurved and dentate-lunulate; a black median line at costa curves inwards and forms the inner edge of the reniform stigma, below which it is bifid to submedian fold; the area between inner and outer lines below the fold and between inner and median above it filled up with black; orbicular roundish, with brown centre and grey annulus; reniform large with olive grey centre and ochreous annulus; terminal area black beyond the subterminal line, which is angled inwards in places; fringe black.

Hindwing: with basal half dirty white, terminal half black forming a border; fringe and termen black at middle, paler above and below.

Underside creamy white to beyond middle; terminal border fuscous grey beyond a blackish outer line; cell-spots black, that on forewing large; fringe of forewing black.

Head, thorax, and base of dorsum black, the rest of dorsum grey.

1 ♀ from Mean Meer, N.W. India, expanding 34 mm.

FAMILY GEOMETRIDAE.

SUBFAMILY OENOCHROMINAE.

60. *Oenochroma cerasiplaga* spec. nov.

Forewing : delicate pale green, densely scaled; costa yellow, becoming fulvous before apex; a straight oblique yellow streak from just before middle of inner margin to vein 5 beyond discocellular; fringe yellow dappled with fulvous orange beyond veins, most strongly towards tornus.

Hindwing : pale blue-green, with the yellow streak fainter.

Underside pale bluish green; costal streak of forewing broader; a pale patch before apex dusted with pinkish; the yellow streak of upperside showing through; a second very faint fulvous streak from before apex incurved to inner margin near the yellow streak; hindwing with a large rounded purple-red blotch with fulvous inner edge lying between veins 6 and 2, showing through on upperside.

Palpi whitish green, with third segment fulvous; face white; antennae and ridge of hair between them fulvous; collar, base of tegulae, and a patch below the eyes yellow; tegulae and patagia blue-green; dorsum whitish green, darker at sides; pectus and venter whitish green; legs whitish densely speckled with dull red.

Expanse of wings : 36 mm.

1 ♂ from Perth, West Australia (G. Watson).
